Relative pressure measuring device

Publication number: DE10134359

Publication date: 2003-02-06

Inventor: BURCZYK DIETFRIED (DE); STOECKLIN TANJA (DE); VELTEN TOMAS DR (DE)

Applicant: ENDRESS & HAUSER GMBH & CO KG (DE)

Classification:

- international: G01L9/00; G01L9/00; (IPC1-7): G01L13/02

- European: G01L9/00D2F2

Application number: DE20011034359 20010714 **Priority number(s):** DE20011034359 20010714

Also published as:

EP1275950 (A2)
US6752021 (B2)
US2003024321 (A1)
EP1275950 (A3)
EP1275950 (B1)

Report a data error here

Abstract not available for DE10134359
Abstract of corresponding document: EP1275950

Device comprises a differential pressure measurement cell (1) with a pressure sensitive element (3) on the process side of which the pressure (p) that is to be measured is applied. On the other side of the element a reference pressure is applied, with the differential pressure measured relative to this reference pressure. The process side pressure tap connects through a connection (15) at one end of the device housing (9). A single tap (29) is made for application of the reference pressure.

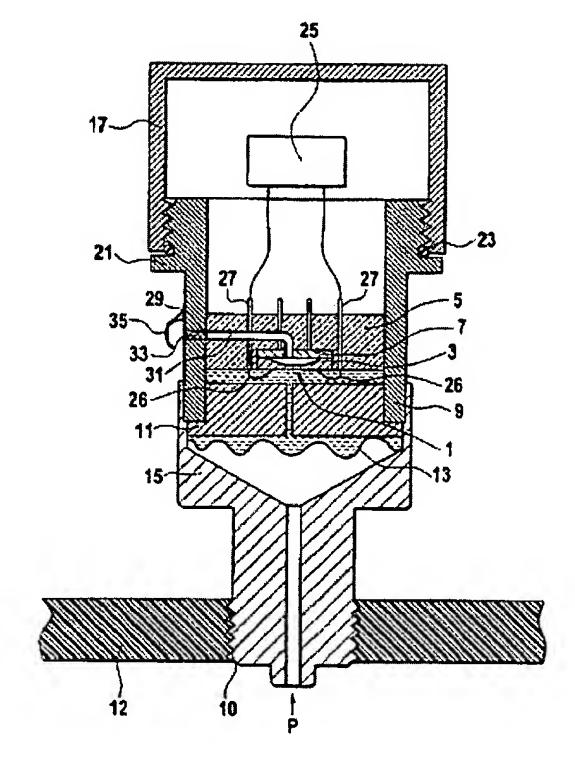


Fig. 1

Data supplied from the esp@cenet database - Worldwide



US006752021B2

(12) United States Patent

Burczyk et al.

450

US 6,752,021 B2 (10) Patent No.: Jun. 22, 2004 (45) Date of Patent:

(54)	RELATIVE PRESSURE MEASURING INSTRUMENT						
(75)	Inventors:	Dietfried Burczyk, Teltow (DE); Thomas Velten, Reifenberg (DE); Tanja Stöcklin, Lörrach (DE)					
(73)	Assignee:	Endress + Hauser GmbH & Co. KG, Maulburg (DE)					
(*)	Notice:	Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.					
(21)	Appl. No.: 10/195,148						
(22)	Filed: Jul. 15, 2002						
(65)	Prior Publication Data						
	US 2003/0024321 A1 Feb. 6, 2003						
(30)	Forei	gn Application Priority Data					
Jul.	14, 2001	(DE) 101 34 359					
(52)	U.S. Cl	G01L 9/00 73/717 earch 73/717, 756, 715, 73/708, 706, 720					
(56)		References Cited					

U.S. PATENT DOCUMENTS

4,685,469 A * 8/1987 Keller 600/488

6,499,352	B2	*	12/2002	Banholzer et al 73/715	
6,516,670	B2	+	2/2003	Hegner et al 73/715	
6.581.469	B2	•	6/2003	Burczyk et al	

OTHER PUBLICATIONS

US 2001/0015105 Gerst et al Aug. 23, 2001.*

* cited by examiner

Primary Examiner—Edward Lefkowitz Assistant Examiner—Andre Allen

(74) Attorney, Agent, or Firm-Bacon & Thomas, PLLC; Felix J. D'Ambrosio

(57)**ABSTRACT**

A relative pressure measuring instrument has a reference pressure feed that offers a high measure of safety and is easy to produce. Included is a relative pressure measuring cell having a pressure sensitive element, on whose processfacing side there is present during operation a pressure (p) to be measured, on whose process-averted side there is present during operation a reference pressure (p_R) to which the pressure (p) to be measured is to be referred, a support on which the relative pressure measuring cell is arranged and which is enclosed in a housing, a process connection, that is connected to a process-facing end of the housing, a measuring instrument housing that is arranged at a processaverted end of the housing, and a reference pressure feed through which during operation the reference pressure (p_R) is led to the process-averted side of the pressure sensitive element, and which leads completely out of the relative pressure measuring instrument laterally through the support and a single bore through the housing.

7 Claims, 2 Drawing Sheets

